

CLAIMS

1. A *Bacillus licheniformis* mutant host cell derived from a parent *B. licheniformis* host cell, which mutant host cell is mutated in one or more gene(s) encoding one or more polypeptide(s) involved in antibiotic synthesis which is at least 80% identical to one or more of the polypeptides shown in SEQ ID NO's: 2 to 22, wherein the mutant host cell expresses at least 5% less of the one or more polypeptide(s) involved in antibiotic synthesis than the parent host cell, when they are cultivated under comparable conditions.
2. The host cell according to claim 1, which is mutated by a partial or complete deletion of the one or more gene(s) encoding the one or more polypeptide(s) involved in antibiotic synthesis.
3. The host cell according to any of claims 1 – 2, which is mutated in two or more genes encoding two or more polypeptides involved in antibiotic synthesis.
4. The host cell according to any of claims 1 – 3, which comprises one or more heterologous gene(s) encoding one or more heterologous polypeptide(s).
5. The host cell according to claim 4, wherein the heterologous gene(s) is present in at least two copies.
6. The host cell according to claim 4 or 5, wherein the heterologous gene(s) are stably integrated into the genome of the cell.
7. The host cell according to any of claims 4 - 6, wherein the heterologous gene(s) is integrated into the genome of the cell without leaving any antibiotic resistance marker genes at the site of integration.
8. The host cell according to any of claims 4 - 7, wherein the heterologous gene(s) are transcribed from a heterologous promoter or from an artificial promoter.
9. The host cell according to any of claims 4 – 8, wherein the heterologous gene(s) are comprised in an operon, preferably a polycistronic operon.
10. The host cell according to any of claims 4 – 9, wherein the heterologous polypeptide(s) is an antimicrobial peptide, or a fusion peptide comprising a peptide part which in its native form has antimicrobial activity.

11. The host cell according to any of claims 4 – 9, wherein the heterologous polypeptide(s) has biosynthetic activity and produces a compound or an intermediate of interest.
- 5 12. The host cell according to claim 11, wherein the compound or intermediate of interest comprises vitamins, amino acids, antibiotics, carbohydrates, or surfactants.
13. The host cell according to claim 12, wherein the carbohydrates comprise hyaluronic acid.
- 10 14. The host cell according to any of claims 4 – 9, wherein the heterologous polypeptide(s) is an enzyme, preferably a secreted enzyme.
- 15 15. The host cell according to claim 14, wherein the enzyme is an enzyme of a class selected from the group of enzyme classes consisting of oxidoreductases (EC 1), transferases (EC 2), hydrolases (EC 3), lyases (EC 4), isomerases (EC 5), and ligases (EC 6).
- 20 16. The host cell according to claim 15, wherein the enzyme is an enzyme with an activity selected from the group of enzyme activities consisting of aminopeptidase, amylase, amyloglucosidase, mannanase, carbohydrase, carboxypeptidase, catalase, cellulase, chitinase, cutinase, cyclodextrin glycosyltransferase, deoxyribonuclease, esterase, galactosidase, beta-galactosidase, glucoamylase, glucose oxidase, glucosidase, haloperoxidase, hemicellulase, invertase, isomerase, laccase, ligase, lipase, lyase, mannosidase, oxidase, pectinase, peroxidase, phytase, phenoloxidase, polyphenoloxidase, protease, ribonuclease, transferase, transglutaminase, and xylanase.
- 25 17. The host cell according to claim 16, wherein the enzyme is an amylase or a mannanase.
- 30 18. A process for producing at least one product of interest in a *Bacillus licheniformis* mutant host cell, comprising cultivating a *B.licheniformis* mutant host cell as defined in any of the claims 1 - 17 in a suitable medium, whereby the said product is produced.
- 35 19. The process according to claim 18, further comprising isolating or purifying the product of interest.

20. A use of a *Bacillus licheniformis* mutant host cell as defined in any of the claims 1 - 17 for producing at least one product of interest comprising cultivating the mutant host cell in a suitable medium whereby the said product is produced.

5 21. The use according to claim 20 further comprising isolating or purifying the product of interest.